

CLAIMS

1. A device transfer method comprising the steps of:

embedding devices arranged on a first substrate into a pressure sensitive adhesive layer provided on a second substrate; and

stripping said devices from said first substrate so as to hold said devices in the state of being embedded in said pressure sensitive adhesive layer.

2. The device transfer method as set forth in claim 1, comprising the step of hardening said pressure sensitive adhesive layer after said devices are held in the state of being embedded in said pressure sensitive adhesive layer.

3. The device transfer method as set forth in claim 2, comprising the step of forming first electric wirings on said pressure sensitive adhesive layer after said pressure sensitive adhesive layer is hardened.

4. The device transfer method as set forth in claim 3, comprising the step of adhering a third substrate onto the side on which said first electric wirings are formed of said pressure sensitive adhesive layer after said first electric wirings are formed on said pressure sensitive adhesive layer.

5. The device transfer method as set forth in claim 4, comprising the step of stripping said second substrate and said pressure sensitive adhesive layer from each other after said third substrate is adhered to the side on which said first electric wirings are formed of said pressure sensitive adhesive layer.

6. The device transfer method as set forth in claim 5, wherein said pressure sensitive adhesive layer is provided with openings reaching said devices after said second substrate and said pressure sensitive adhesive layer are stripped from each other.

7. The device transfer method as set forth in claim 6, comprising the step of filling said openings with a conductive material and forming second electric wirings on said pressure sensitive adhesive layer.

8. The device transfer method as set forth in claim 1, further comprising the step of bringing said devices into contact with a temporary adhesion layer provided on said first substrate for temporarily adhering said devices to said temporary adhesion layer so as thereby to arrange said devices on said first substrate, before said embedding of said devices into said pressure sensitive adhesive layer.

9. The device transfer method as set forth in

claim 8, wherein the tack of said pressure sensitive adhesive layer provided on said second substrate is greater than the tack of said temporary adhesion layer provided on said first substrate.

10. The device transfer method as set forth in claim 9, wherein the tack of said pressure sensitive adhesive layer or said temporary adhesion layer is changed so that the tack of said pressure sensitive adhesive layer will be greater than the tack of said temporary adhesion layer.

11. The device transfer method as set forth in claim 1, wherein said embedding into said pressure sensitive adhesive layer is carried out to such a degree that said devices are partly embedded.

12. The device transfer method as set forth in claim 1, wherein said pressure sensitive adhesive layer is formed of an insulating material.

13. A device transfer method comprising the steps of:

embedding other-side devices arranged on a first substrate into a pressure sensitive adhesive layer provided on a second substrate in the condition where one-side devices are embedded in said pressure sensitive adhesive layer; and

stripping said other-side devices from said first substrate and so as to hold said other-side devices in the state of being embedded in said pressure sensitive adhesive layer.

14. The device transfer method as set forth in claim 13, wherein said one-side devices and said other-side devices have different characteristics.

15. The device transfer method as set forth in claim 13, wherein said one-side devices and said other-side devices are held in said embedded state in different areas on said substrate.

16. A display apparatus obtained by a method comprising the steps of:

embedding devices arranged on a first substrate into a pressure sensitive adhesive layer provided on a second substrate;

stripping said devices from said first substrate so as to hold said devices in the state of being embedded in said pressure sensitive adhesive layer, and hardening said pressure sensitive adhesive layer in this condition;

forming first electric wirings on said pressure sensitive adhesive layer, adhering a third substrate onto the side on which said first electric wirings are formed of said pressure sensitive adhesive layer, and stripping

said second substrate and said pressure sensitive adhesive layer from each other; and

    providing said pressure sensitive adhesive layer with openings reaching said devices, filling said openings with a conductive material, and forming second electric wirings on said pressure sensitive adhesive layer.

17. The display apparatus as set forth in claim 16, wherein display is carried out through simple matrix driving by impressing a voltage on said devices through said first electric wirings and said second electric wirings.

18. A display apparatus obtained by a method comprising the steps of:

    embedding one-side devices arranged on a first substrate into a pressure sensitive adhesive layer provided on a second substrate, and stripping said one-side devices from said first substrate so as to hold said one-side devices in the state of being embedded in said pressure sensitive adhesive layer;

    further embedding other-side devices arranged on said first substrate into said pressure sensitive adhesive layer, and stripping said other-side devices from said first substrate so as to hold said other-side

devices in the state of being embedded in said pressure sensitive adhesive layer, in the condition where said one-side devices are embedded in said pressure sensitive adhesive layer;

hardening said pressure sensitive adhesive layer in the condition where said one-side devices and said other-side devices are held in the state of being embedded in said pressure sensitive adhesive layer;

forming first electric wirings on said pressure sensitive adhesive layer, adhering a third substrate onto the side on which said first electric wirings are formed of said pressure sensitive layer, and stripping said second substrate and said pressure sensitive adhesive layer from each other; and

providing said pressure sensitive adhesive layer with openings reaching said one-side devices or said other-side devices, filling said openings with a conductive material, and forming second electric wirings on said pressure sensitive adhesive layer.

19. The display apparatus as set forth in claim 18, wherein said one-side devices and said other-side devices have different characteristics.

20. The display apparatus as set forth in claim 18, wherein said one-side devices and said other-side devices

are held in said embedded state in different areas on said second substrate.

21. The display apparatus as set forth in claim 18, wherein display is carried out through simple matrix driving by impressing a voltage on said one-side devices or said other-side devices through said first electric wirings and said second electric wirings.

22. The display apparatus as set forth in claim 18, wherein said one-side devices or said other-side devices are display devices or driving circuit devices.

23. The display apparatus as set forth in claim 22, wherein display is carried out through active matrix driving by impressing a voltage on said display devices by said driving circuit devices.